Jingqi Huang

https://jingqihuang.github.io

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EDUCATION

Purdue University — West Lafayette
Ph.D. in Computer Science — May 2020 – Present
  Advisers: Muhammad Shahbaz

University of California, San Diego — La Jolla, California
M.S. in Electrical and Computer Engineering — March 2020
  Advisor: Xinyu Zhang

Beijing University of Posts and Telecommunications — Beijing, China
B.E. in Electrical and Computer Engineering — Sep 2018
  Advisor: Anfu Zhou

PROFESSIONAL & RESEARCH EXPERIENCE

Purdue University — West Lafayette, IN
Assistant in Research — May 2020 – Present
  – Developed iCellSpeed [2] to allow user-side cell selection for improved performance and resource utilization.

Intel Labs — Hillsboro, OR
Research Scientist Intern — May 2021 – Aug 2021
  – Implemented in-network ML aggregation and Map/Reduce operations on programmable data planes.

University of California, San Diego — La Jolla, CA
Research Assistant — Sep 2018 – Mar 2020
  – Implemented and evaluated the millimeter-wave vehicle-to-everything (mmWave V2X) use case for 5G NR [3].
  – Designed and developed X-Array [4] for prototyping and evaluating omnidirectional millimeter-wave (mmWave) network.

Beijing University of Posts and Telecommunications — Beijing, China
Assistant in Research — Aug 2014 – Jun 2018
  – Designed and developed KPad [6], a system to increase channel utilization in Wi-Fi MU-MIMO.
  – Developed Romil [1, 5] for robust indoor mmWave communication.

PUBLICATIONS

Journal Articles

1. Anfu Zhou, Shaoqing Xu, Song Wang, *Jingqi Huang*, Shaoyuan Yang, Teng Wei, Xinyu Zhang, and Huadong Ma. Robotic Millimeter-Wave Wireless Networks. **IEEE/ACM Transactions on Networking**, 28(4):1534–1549, 2020

Conference Papers

2. Haotian Deng, Qianru Li, *Jingqi Huang*, and Chunyi Peng. iCellSpeed: Increasing Cellular Data Speed with Device-Assisted Cell Selection. In **ACM MobiCom**, 2020
3. Song Wang*, *Jingqi Huang**, and Xinyu Zhang. Demystifying Millimeter-Wave V2X: Towards Robust and Efficient Directional Connectivity Under High Mobility. In **ACM MobiCom**, 2020. (*equal contribution)
4. Song Wang*, *Jingqi Huang**, Xinyu Zhang, Hyoil Kim, and Sujit Dey. X-array: Approximating Omnidirectional Millimeter-Wave Coverage Using an Array of Phased Arrays. In **ACM MobiCom**, 2020. (*equal contribution)
5. Anfu Zhou, Shaoqing Xu, Song Wang, Jingqi Huang, Shaoyuan Yang, Teng Wei, Xinyu Zhang, and Huadong Ma. Robot Navigation in Radio Beam Space: Leveraging Robotic Intelligence for Seamless mmWave Network Coverage. In **ACM MobiHoc**, 2019
6. Song Wang*, *Jingqi Huang**, and Anfu Zhou. KPad: Maximizing Channel Utilization for MU-MIMO Systems Using Knapsack Padding. In **IEEE ICC**, 2018. (*equal contribution)

SYSTEMS & PROGRAMMING SKILLS

– Languages: Python, C/C++, P4, and SQL

– Technologies – SDN/OpenFlow, ONF Aether, Docker, Kubernetes, Mininet, and Wireless Insight

RECOGNITIONS AND AWARDS

– **Beijing University of Posts and Telecommunications Scholarship** for Undergraduate Education (2015–2017)